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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/673,212  | 09/30/2003  | Kang Soo Seo         | 46500-000531/US     | 9584             |
| 30593 7590 10/16/2008<br>HARNESS, DICKEY & PIERCE, P.L.C. |             |                      | EXAMINER            |                  |
| P.O. BOX 8910   | )           | ZHAO, DAQUAN         |                     |                  |
| RESTON, VA 20195  |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2621                |                  |
|   |             |                      |                     |                  |
|   |             |                      | MAIL DATE           | DELIVERY MODE    |
|   |             |                      | 10/16/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.  | Applicant(s)   |  |  |  |
|---|--|--|--|--|--|
|   | 10/673,212   | SEO ET AL.   |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |
|   | DAQUAN ZHAO  | 2621   |  |  |  |
| The MAILING DATE of this communication app Period for Reply   | ears on the cover sheet with the c   | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).                            | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | l. lely filed the mailing date of this communication. (35 U.S.C. § 133). |  |  |  |
| Status  |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>25 Ju</u>  | action is non-final.<br>nce except for formal matters, pro   |  |  |  |  |
| Disposition of Claims   |  |  |  |  |  |
| 4) ☐ Claim(s) 1-3,5,6,8-14,16-18,20-22,24-26 and 2 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3,5-6,8-14,16-18,20-22,24-26 and 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers  9) ☐ The specification is objected to by the Examiner 10) ☐ The drawing(s) filed on 30 September 2003 is/a Applicant may not request that any objection to the company of the page 2003.  | vn from consideration.  d 28 is/are rejected. election requirement.  r. are: a)⊠ accepted or b)□ objected. drawing(s) be held in abeyance. See                     | ted to by the Examiner.<br>e 37 CFR 1.85(a).                             |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 7/30/2008; 12/12/2007; 9/29/2005; 6/21/2  | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 004. 6) Other:  | te   |  |  |  |



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#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/25/2008 has been entered.

### Response to Arguments

- 2. Applicant's arguments filed 7/25/2008 have been fully considered but they are not persuasive.
- 3. For the rejection of 112 first paragraph, applicant state the support for "recording medium". However, there's no support for the term "computer readable medium". Replacing "computer readable medium" with "recording medium" would overcome the 112 first paragraph rejection.
- 4. Applicant also argues, in page 11 of the remark, Miwa et al fail to teach the identifier.
- 5. Column 20, line 50- column 21, line 6, and column 33, lines 40-57 of Miwa et al the decoder use the coordination to identify the color palette, wherein the decoding process is part of the reproduction. The examiner interprets the coordinate of the item

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color information as the claimed "identifier" and the coordinate is used by the decoder for reproduction.

## Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-6 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For claim 1, there's no teaching in the prior art for the term "computer readable medium"

Claims 2-3, 5-6 and 8 incorporate the same deficiency as set forth in claim 1 above.

# Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 5-6 and 8 are rejected under 35 U.S.C. 101 because claims are directed to non-statutory subject matter.

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For claim 1, the examiner treats the term "computer readable medium" as a signal, wherein the signal is a non-statutory subject matter, because the specification does not provide any description for this term.

Claims 2-3, 5-6 and 8 incorporate the same deficiency as set forth in claim 1 above.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1, 2, 3, 8, 9, 10, 11, 12, 13, 16, 17, 20, 21, 24, 25 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Miwa et al (US 5,923,627).

For claim 1, Miwa et al teach a computer readable medium including graphic data and executable management information recorded by a recording device and configured to be reproduced by a reproduction device in a manner instructed by the executable management information (e.g. column 19, line 54- column 20, line 12 and figures 6 and 9A, the highlight information in the management information of the DVD is used to manage the sup-picture packet to produce menu, wherein the sub-picture or the menu corresponds to the graphic data), the computer readable comprising:

at least one graphic image reproduction information segment (e.g. figure 6D, 9A, 9B and column 2, line 66-column 21, line 20, column 33, line 41-57, the highlight information shown figures 9A-9B is considered to be the graphic image reproduction information segment, wherein the Highlight information is in the PCI, which is in the management information in figures 5A and 6D, and the sub-picture (or sub-title) data as shown in figure 5Ais considered to be the graphic data) one or more graphic images (e.g. menu is consider to be image) and one or more palette information segments (e.g. item information are considered to be the palette information segments) and opacity information for the associate color information (the opacity corresponds to the mixing ratio, column 33, lines 60-67), each palette information segment providing color information (e.g. each item information provides color pattern), each graphic image reproduction information segment providing reproduction information for reproducing one or more graphic images (e.g. column 33, lines 40-57, using the item color information to reproduce the sup-picture),

wherein each palette information segment has an identifier and the least one graphic image reproduction image refers to one or more palette information segments using the identifier of the palette information segment during reproduction of one or more graphic image (Column 20, line 50- column 21, line 6, and column 33, lines 40-57 of Miwa et al the decoder use the coordination to identify the color palette, wherein the decoding process is part of the reproduction. The examiner interprets the coordinate of the item color information as the claimed "identifier" and the coordinate is used by the decoder for reproduction)

Claim 9 is rejected for the same reasons as discussed in claim 1 above.

Claim 10 is rejected for the same reasons as discussed in claim 1 above, wherein figure 15 of Miwa et al teach an apparatus for reproducing the data structure of an optical disc, and multiple controlling units 83, 93 are shown in figure 15.

Claim 11 is rejected for the same reasons as discussed in claim 1 above, wherein column 4, lines 45-57 teach the corresponding recording method of the data structure shown in figures 2-13.

Claim 12 is rejected for the same reasons as discussed in claim 1 above, wherein column 4, lines 45-57 and column 47, lines 50-60 teach encoding the data structure in the optical disc. There must be a encoder and controller for recording the video.

For claim 2, Miwa et al teach the reproduction information identifies a palette information segment to use in reproducing one or more graphic images (e.g. column 33, lines 41-57).

For claim 3, Miwa et al teach two or more graphic image reproduction information segments include reproduction information that identify a same palette information segment (e.g. figure 9B, each item information contains plurality color pattern, or user can choose the same color pattern for different sub-pictures).

For claims 13, 17, 21, and 25, Miwe et al teach the reproduction information identifies a palette information segment to use in reproducing one or more graphic images (e.g. column 33, lines 41-57) and two or more graphic image reproduction information segments include reproduction information that identify a same palette

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information segment (e.g. figure 9B, each item information contains plurality color pattern, or user can choose the same color pattern for different sub-pictures).

For claims 8, 16, 20, 24, and 28, Miwa et al teach two or more graphic image reproduction information segments share a same palette information segment (e.g. user can choose the same color pattern for different sub-pictures).

# Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 5, 6, 14, 18, 22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miwa et al (US 5,923,627) as applied to claims 1, 2,3, 8, 9, 10, 11, 12, 13, 16, 17, 20, 21, 24, 25 and 28 above, and further in view of Pintz et al (US 6,876,008 B1)

See the teaching of Miwa et al above.

For claims 5, 6, 14, 18, 22, and 26, Miwa et al fail to teach the transparency or the opacity level. Pintz et al teach the transparency or the opacity level (e.g. column 1, lines 10-27, the examiner treats the opacity level the same as the transparency level) It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Pintz et al into the teaching of Miwa et al to improve the quality of the display picture.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daquan Zhao/ Examiner, Art Unit 2621 Daquan Zhao

/Thai Tran/ Supervisory Patent Examiner, Art Unit 2621